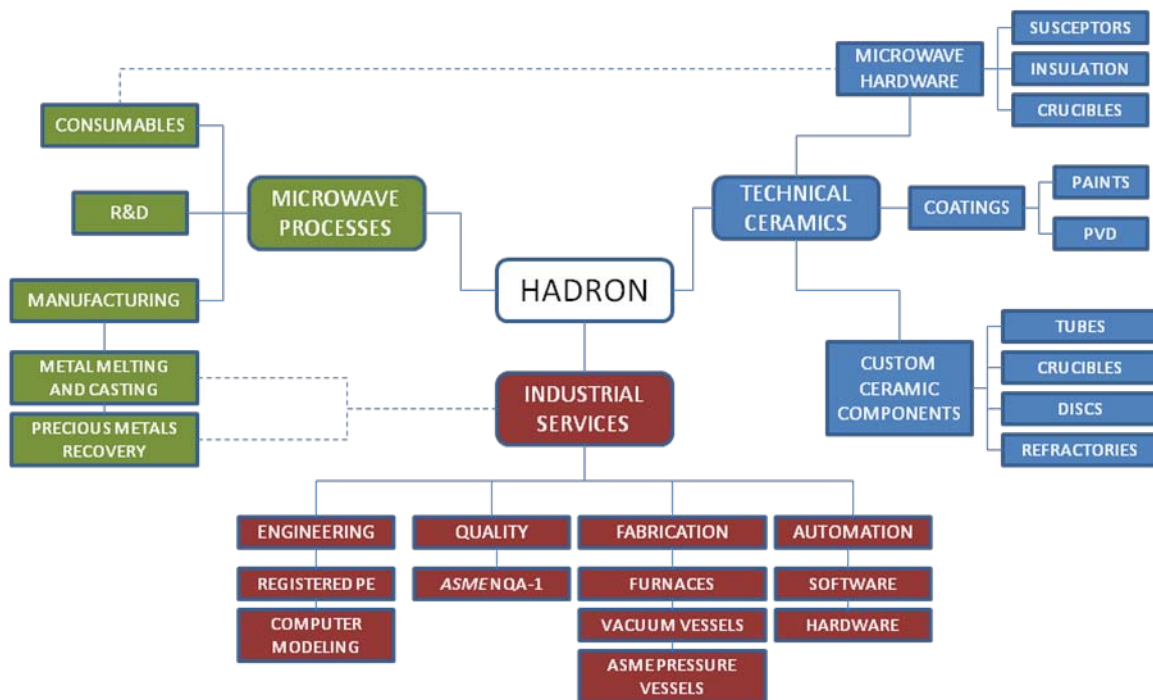


- Microwave Technologies
- Custom Technical Ceramics
- Industrial Services
- Quality Assurance, NQA - 1

Hadron Technologies Inc. develops and manufactures innovative microwave systems for a variety of aerospace, defense, industrial, and nuclear applications. Spawned from the Y-12 National Security Complex's development and production facilities in Oak Ridge, Tennessee, Hadron Technologies, Inc. has become a leader in microwave processing technology and the premiere manufacturer of production microwave processing systems in the United States.

In support of many microwave applications, Hadron Technologies, Inc. has also developed a sophisticated capability in the development and manufacture of custom technical ceramics required for the industrial and high technology applications we support. Hadron Technologies, Inc. has developed and manufactured high temperature ceramic crucibles, lids, mixing rods, nails, pins, plates, and other shapes for use by industry and research facilities worldwide. We currently have over 400 ceramic formulations on file that we have produced and provided to customers all over the world.



Hadron Technologies, Inc. Products and Services

In addition microwave and ceramics manufacturing, Hadron Technologies, Inc. also provides project management and NQA-1 quality assurance services, as well as the design, manufacture, and integration of sophisticated equipment for specific technical applications. We are currently in the process adding the NQA-1 design certification to our list of services.

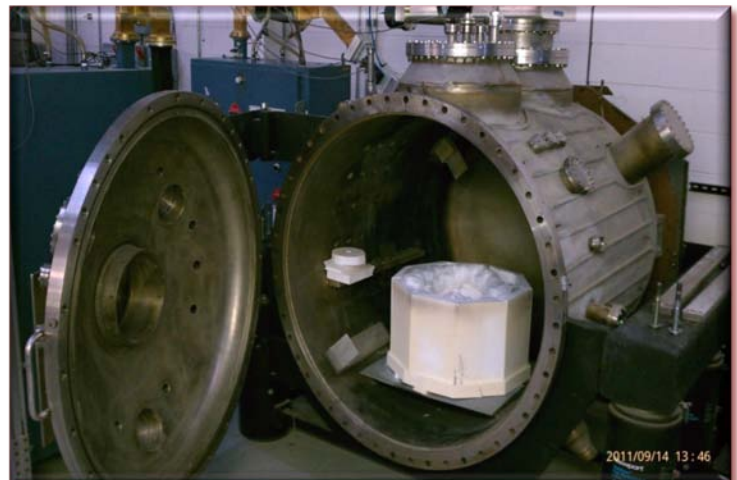
- Microwave Technologies
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Microwave Technologies

The founder of Hadron Technologies, Inc. developed and patented the original process for melting metal using microwaves and went on to also develop patented processes for high temperature ceramic firing and other microwave applications. With more than 20 years of hands-on expertise designing and building microwave furnaces, the staff at Hadron Technologies, Inc. is continually developing new methods and technologies for the processing materials using the microwave.

Our combination of equipment, high purity high temperature ceramics, and insulation technologies allow us to achieve temperatures up to 2400° Centigrade within our systems and undertake many applications previously thought impossible using microwave technology. Some of our recent microwave projects include:

- 12 kW Microwave Melting and Casting System
- 6 kW High Vacuum Titanium Casting System
- 3 kW High Vacuum Experimental Chamber
- 1.2 kW Micro Furnace
- 12 kW Microwave Ceramic Sintering System



- Microwave Technologies
- Custom Technical Ceramics
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Custom Technical Ceramics

At Hadron Technologies, Inc. our extensive manufacturing experience allows us to develop custom ceramic body formulations, as well as manufacturing standard shapes like crucibles, tubes, discs, pins, and rods. Hadron Technologies, Inc. can manufacture ceramics using slip formulation, slip processing and conditioning, isostatic pressing (up to 60,000 psi), and other refractory casting processes.



We have capabilities on site for green body drying and viscosity/rheology evaluation, as well as common finishing processes. We can form, dry, and grind our ceramics to suit your needs. We not only design and manufacture microwave crucibles, insulation, and refractory materials, but also kiln furniture and nails. We work in a variety of materials, including:

Alumina (85%-99.9%)
Magnesium Oxide
Refractory Alumina

Yttria
YTZP Zirconia

Silicon Carbide
SZDYF Zirconia

Hadron Technologies, Inc. also performs application-specific thermal processing. Our equipment – which includes high temperature furnaces (~1700C max temperature), intermediate temperature bisque furnaces, and controlled atmosphere furnaces – allows us to execute a wide variety of thermal processing procedures to complete the manufacturing process.



- Microwave Technologies
- Custom Technical Ceramics
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Our Experience

Weapons Sanitization

- 30 kW Microwave Turnkey System for DOE Pantex.
- Certified for Beryllium Processing by the State of Texas.
- First Production Microwave Furnace for melting metals.



Energy Efficiency

- Revolutionary Processing for High Efficiency Magnets.
- Improving Energy Efficiency in Generators and Motors.

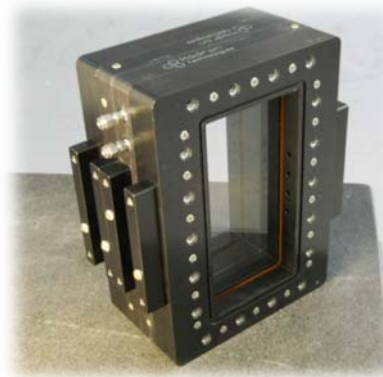
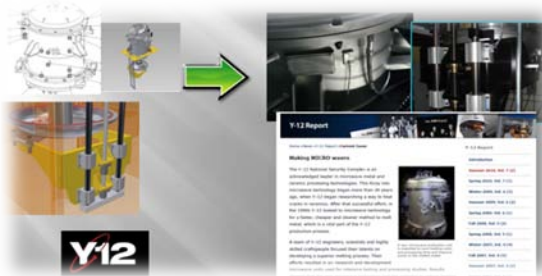


Waste Management

- Vapor Barriers for High Power Microwave Processing of Waste Plastics.

Uranium Metal Casting

- 24 kW Microwave Uranium Casting System for DOE Y-12.



X-Ray Inspection

- Precision mobile positioning carts for critical component X-ray inspection processes.



Nuclear Materials Processing

- Custom Formulated Ceramic Bodies and Shapes.
- MgO and Yttria Crucibles.

